Message

From: Yannayon, Laura [Yannayon.Laura@epa.gov]
Sent: 7/10/2020 3:00:26 PM
To: Jennifer Paskash [paskash.jennifer@azdeq.gov]
CC: Beckham, Lisa [BECKHAM.LISA@EPA.GOV]
Subject: RE: Inherent Process Equipment Question

Flag: Follow up

Good Morning Jennifer,
At first blush, I tend to agree with you. Let me do some checking and see if I can find something to support this position. I'll try to get back to you early next week.

Laura

From: Jennifer Paskash <paskash.jennifer@azdeq.gov>
Sent: Friday, July 10, 2020 7:01 AM
To: Yannayon, Laura <Yannayon.Laura@epa.gov>
Subject: Inherent Process Equipment Question

Good morning Laura,

We are in the process of determining what type of permit/registration is needed for a facility that processes hospital/medical/infectious waste via pyrolysis. Currently, we are going back and forth with the facility about whether or not the ceramic filters installed prior to the exhaust can be considered inherent process equipment or a pollution control device. Therefore, management has requested that I reach out to EPA to weigh in on the determination.

The facility is arguing that the ceramic filters meet the definition of inherent process equipment since the unit cannot physically operate without the device (as determined by a PLC unit) and the ceramic filters are installed for safety. The manufacturer stated "since the design does not have a dump stack, the ID fan required the highest level of temperature protection to ensure a safe shutdown in the event the economizer failed. Economizer failure would expose the gas clean up unit (common bag design) to experience a sudden burst of hot gas in excess of 900°C which surpassed its operating limits thus causing a fire, rendering the ID fan useless to maintain negative pressure to perform a safe shut down. Since common gas clean up technologies have no capability of holding negative pressures or extreme temperatures in such events, a company was engaged (Glosfume) to design and supply a sealed unit to work in unison with the rest of the pyrolysis process to ensure safe operation under negative pressures and extreme high temperature conditions."

While I agree that the selection of ceramic filters over a fabric filter baghouse is an inherently safer design, I disagree that it should be considered as an inherent part of the process for the following reasons:

1. The facility has not provided any justification for the purpose of the ceramic filters, therefore it is my understanding that the sole purpose of the equipment is to control emissions from the facility.
2. The recovered material from the filters is collected and sent to a landfill to be disposed of.

We would really appreciate your feedback on this matter.

Thank you,

Jenn Paskash

Air Permit Engineer
Ph: 602-771-4697

azdeq.gov

Your feedback matters to ADEQ. Visit azdeq.gov/feedback